SEQUENCE LIST

<110> Yamanouchi Pharmaceutical Co., Ltd.

T0020 <120> A novel G protein coupled receptor protein

<130> Y9905-PCT

<150> JP P1998-060245
<151> 1998-03-12

<150> JP P1999-026774
<151> 1999-02-03

<160> 26

<170> PatentIn Ver. 2.0

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<223> SREB1

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gcc ctg ggc ctc aag ctg gcc acg ctc agc ctg ctg ctg tgc gtg agc   96
Ala Leu Gly Leu Lys Leu Ala Thr Leu Ser Leu Leu Leu Cys Val Ser
            20                  25                  30

cta gcg ggc aac gtg ctg ttc gcg ctg ctg atc gtg cgg gag cgc agc   144
Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg Ser
        35                  40                  45

ctg cac cgc gcc ccg tac tac ctg ctg ctc gac ctg tgc ctg gcc gac   192
Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala Asp
    50                  55                  60

ggg ctg cgc gcg ctc gcc tgc ctc ccg gcc gtc atg ctg gcg gcg cgg   240
Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala Arg
65                  70                  75                  80

cgt gcg gcg gcc gcg gcg ggg gcg ccg ccg ggc gcg ctg ggc tgc aag   288
Arg Ala Ala Ala Ala Ala Gly Ala Pro Pro Gly Ala Leu Gly Cys Lys
                85                  90                  95

ctg ctc gcc ttc ctg gcc gcg ctc ttc tgc ttc cac gcc gcc ttc ctg   336
Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe Leu
            100                 105                 110
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ctg ctg ggc gtg ggc gtc acc cgc tac ctg gcc atc gcg cac cac cgc 384
Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His Arg
115 120 125

ttc tat gca gag cgc ctg gcc ggc tgg ccg tgc gcc gcc atg ctg gtg 432
Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu Val
130 135 140

tgc gcc gcc tgg gcg ctg gcg ctg gcc gcg gcc ttc ccg cca gtg ctg 480
Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Ala Phe Pro Pro Val Leu
145 150 155 160

gac ggc ggt ggc gac gac gag gac gcg ccg tgc gcc ctg gag cag cgg 528
Asp Gly Gly Gly Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu Gln Arg
165 170 175

ccc gac ggc gcc ccc ggc gcg ctg ggc ttc ctg ctg ctg ctg gcc gtg 576
Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Leu Ala Val
180 185 190

gtg gtg ggc gcc acg cac ctc gtc tac ctc cgc ctg ctc ttc ttc atc 624
Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe Phe Ile
195 200 205

cac gac cgc cgc aag atg cgg ccc gcg cgc ctg gtg ccc gcc gtc agc 672
His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala Val Ser
210 215 220

cac gac tgg acc ttc cac ggc ccg ggc gcc acc ggc cag gcg gcc gcc 720
His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala Ala Ala
225 230 235 240

aac tgg acg gcg ggc ttc ggc cgc ggg ccc acg ccg ccc gcg ctt gtg 768
Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala Leu Val
245 250 255

ggc atc cgg ccc gca ggg ccg ggc cgc ggc gcg cgc cgc ctc ctc gtg 816
Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu Leu Val
260 265 270

ctg gaa gaa ttc aag acg gag aag agg ctg tgc aag atg ttc tac gcc 864
Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe Tyr Ala
275 280 285

gtc acg ctg ctc ttc ctg ctc ctc tgg ggg ccc tac gtc gtg gcc agc 912
Val Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val Ala Ser
290 295 300

tac ctg cgg gtc ctg gtg cgg ccc ggc gcc gtc ccc cag gcc tac ctg 960
Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala Tyr Leu
305 310 315 320

acg gcc tcc gtg tgg ctg acc ttc gcg cag gcc ggc atc aac ccc gtc 1008
Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn Pro Val
325 330 335

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gtg tgc ttc ctc ttc aac agg gag ctg agg gac tgc ttc agg gcc cag   1056
Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg Ala Gln
            340                 345                 350

ttc ccc tgc tgc cag agc ccc cgg acc acc cag gcg acc cat ccc tgc   1104
Phe Pro Cys Cys Gln Ser Pro Arg Thr Thr Gln Ala Thr His Pro Cys
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gac ctg aaa ggc att ggt tta tga                                   1128
Asp Leu Lys Gly Ile Gly Leu
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<213> Homo sapiens

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            20                  25                  30

Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg Ser
        35                  40                  45

Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala Asp
    50                  55                  60

Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala Arg
65                  70                  75                  80

Arg Ala Ala Ala Ala Ala Gly Ala Pro Pro Gly Ala Leu Gly Cys Lys
                85                  90                  95

Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe Leu
            100                 105                 110

Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His Arg
        115                 120                 125

Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu Val
    130                 135                 140

Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Ala Phe Pro Pro Val Leu
145                 150                 155                 160

Asp Gly Gly Gly Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu Gln Arg
                165                 170                 175

Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Leu Ala Val
            180                 185                 190
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Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe Phe Ile
195 200 205

His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala Val Ser
210 215 220

His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala Ala Ala
225 230 235 240

Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala Leu Val
245 250 255

Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu Leu Val
260 265 270

Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe Tyr Ala
275 280 285

Val Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val Ala Ser
290 295 300

Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala Tyr Leu
305 310 315 320

Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn Pro Val
325 330 335

Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg Ala Gln
340 345 350

Phe Pro Cys Cys Gln Ser Pro Arg Thr Thr Gln Ala Thr His Pro Cys
355 360 365

Asp Leu Lys Gly Ile Gly Leu
370 375

<210> 3
<211> 1113
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(1110)
<223> SREB2

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cct cta aca gcc ttt ctg aaa ctg act tcc ttg ggt ttc ata ata gga 96
Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly
20 25 30

gtc agc gtg gtg ggc aac ctc ctg atc tcc att ttg cta gtg aaa gat 144
Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
35 40 45

aag acc ttg cat aga gca cct tac tac ttc ctg ttg gat ctt tgc tgt 192
Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
50 55 60

tca gat atc ctc aga tct gca att tgt ttc cca ttt gtg ttc aac tct 240
Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
65 70 75 80

gtc aaa aat ggc tct acc tgg act tat ggg act ctg act tgc aaa gtg 288
Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
85 90 95

att gcc ttt ctg ggg gtt ttg tcc tgt ttc cac act gct ttc atg ctc 336
Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
100 105 110

ttc tgc atc agt gtc acc aga tac tta gct atc gcc cat cac cgc ttc 384
Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
115 120 125

tat aca aag agg ctg acc ttt tgg acg tgt ctg gct gtg atc tgt atg 432
Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
130 135 140

gtg tgg act ctg tct gtg gcc atg gca ttt ccc ccg gtt tta gac gtg 480
Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
145 150 155 160

ggc act tac tca ttc att agg gag gaa gat caa tgc acc ttc caa cac 528
Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
165 170 175

cgc tcc ttc agg gct aat gat tcc tta gga ttt atg ctg ctt ctt gct 576
Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Leu Ala
180 185 190

ctc atc ctc cta gcc aca cag ctt gtc tac ctc aag ctg ata ttt ttc 624
Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
195 200 205

gtc cac gat cga aga aaa atg aag cca gtc cag ttt gta gca gca gtc 672
Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
210 215 220

agc cag aac tgg act ttt cat ggt cct gga gcc agt ggc cag gca gct 720
Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
225 230 235 240

gcc aat tgg cta gca gga ttt gga agg ggt ccc aca cca ccc acc ttg 768
Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu
245 250 255

ctg ggc atc agg caa aat gca aac acc aca ggc aga aga agg cta ttg 816
Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
260 265 270

gtc tta gac gag ttc aaa atg gag aaa aga atc agc aga atg ttc tat 864
Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
275 280 285

ata atg act ttt ctg ttt cta acc ttg tgg ggc ccc tac ctg gtg gcc 912
Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
290 295 300

tgt tat tgg aga gtt ttt gca aga ggg cct gta gta cca ggg gga ttt 960
Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe
305 310 315 320

cta aca gct gct gtc tgg atg agt ttt gcc caa gca gga atc aat cct 1008
Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
325 330 335

ttt gtc tgc att ttc tca aac agg gag ctg agg cgc tgt ttc agc aca 1056
Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
340 345 350

acc ctt ctt tac tgc aga aaa tcc agg tta cca agg gaa cct tac tgt 1104
Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys
355 360 365

gtt ata tga 1113
Val Ile
370

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<212> PRT
<213> Homo sapiens

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Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
35 40 45

Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
50 55 60

Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
65 70 75 80

Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
85 90 95

Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
100 105 110

Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
115 120 125

Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
130 135 140

Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
145 150 155 160

Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
165 170 175

Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Leu Ala
180 185 190

Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
195 200 205

Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
210 215 220

Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
225 230 235 240

Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu
245 250 255

Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
260 265 270

Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
275 280 285

Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
290 295 300

Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe
305 310 315 320

Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
325 330 335

Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
340 345 350

Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys
355 360 365

Val Ile
370

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<222> (1)..(1119)
<223> SREB3

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 1               5                  10                  15

cca ccg tcc gca tca gct tat gtg aag ctg gta ctg ctg gga ctg att   96
Pro Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile
            20                  25                  30

atg tgc gtg agc ctg gcg ggt aac gcc atc ttg tcc ctg ctg gtg ctc  144
Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
        35                  40                  45

aag gag cgt gcc ctg cac aag gct cct tac tac ttc ctg ctg gac ctg  192
Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
    50                  55                  60

tgc ctg gcc gat ggc ata cgc tct gcc gtc tgc ttc ccc ttt gtg ctg  240
Cys Leu Ala Asp Gly Ile Arg Ser Ala Val Cys Phe Pro Phe Val Leu
65                  70                  75                  80

gct tct gtg cgc cac ggc tct tca tgg acc ttc agt gca ctc agc tgc  288
Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
                85                  90                  95

aag att gtg gcc ttt atg gcc gtg ctc ttt tgc ttc cat gcg gcc ttc  336
Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
            100                 105                 110

atg ctg ttc tgc atc agc gtc acc cgc tac atg gcc atc gcc cac cac  384
Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
        115                 120                 125

cgc ttc tac gcc aag cgc atg aca ctc tgg aca tgc gcg gct gtc atc  432
Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
    130                 135                 140

tgc atg gcc tgg acc ctg tct gtg gcc atg gcc ttc cca cct gtc ttt  480
Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
145                 150                 155                 160

gac gtg ggc acc tac aag ttt att cgg gag gag gac cag tgc atc ttt  528
Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
                165                 170                 175

gag cat cgc tac ttc aag gcc aat gac acg ctg ggc ttc atg ctt atg  576
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Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met
            180                 185                 190

ttg gct gtg ctc atg gca gct acc cat gct gtc tac ggc aag ctg ctc   624
Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu
        195                 200                 205

ctc ttc gag tat cgt cac cgc aag atg aag cca gtg cag atg gtg cca   672
Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
    210                 215                 220

gcc atc agc cag aac tgg aca ttc cat ggt ccc ggg gcc acc ggc cag   720
Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
225                 230                 235                 240

gct gct gcc aac tgg atc gcc ggc ttt ggc cgt ggg ccc atg cca cca   768
Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
                245                 250                 255

acc ctg ctg ggt atc cgg cag aat ggg cat gca gcc agc cgg cgg cta   816
Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
            260                 265                 270

ctg ggc atg gac gag gtc aag ggt gaa aag cag ctg ggc cgc atg ttc   864
Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
        275                 280                 285

tac gcg atc aca ctg ctc ttt ctg ctc ctc tgg tca ccc tac atc gtg   912
Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
    290                 295                 300

gcc tgc tac tgg cga gtg ttt gtg aaa gcc tgt gct gtg ccc cac cgc   960
Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
305                 310                 315                 320

tac ctg gcc act gct gtt tgg atg agc ttc gcc cag gct gcc gtc aac   1008
Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
                325                 330                 335

cca att gtc tgc ttc ctg ctc aac aag gac ctc aag aag tgc ctg agg   1056
Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
            340                 345                 350

act cac gcc ccc tgc tgg ggc aca gga ggt gcc ccg gct ccc aga gaa   1104
Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
        355                 360                 365

ccc tac tgt gtc atg tga                                          1122
Pro Tyr Cys Val Met
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<213> Homo sapiens

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Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
35 40 45

Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
50 55 60

Cys Leu Ala Asp Gly Ile Arg Ser Ala Val Cys Phe Pro Phe Val Leu
65 70 75 80

Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
85 90 95

Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
100 105 110

Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
115 120 125

Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
130 135 140

Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
145 150 155 160

Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
165 170 175

Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met
180 185 190

Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu
195 200 205

Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
210 215 220

Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
225 230 235 240

Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
245 250 255

Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
260 265 270

Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
275 280 285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
290 295 300

Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
305 310 315 320

Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
325 330 335

Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
340 345 350

Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
355 360 365

Pro Tyr Cys Val Met
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<210> 7
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Forward primer

<400> 7
aaaatctaga cgcgatggcg aacgcgagcg a 31

<210> 8
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 8
aaaatctaga gtctatgtgg cggggcctcc c 31

<210> 9
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Forward primer

<400> 9
aaaatctaga tctatggcga actatagcca tgca 34

<210> 10

<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 10
aaaatctaga aaggctaaag atttacagat gctcc 35

<210> 11
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Forward primer

<400> 11
aaaatctaga gtatggccaa cactaccgga gag 33

<210> 12
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 12
aaaatctaga cctgtctgcc taccagcctg c 31

<210> 13
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:FLAG epitope

<400> 13
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<210> 14
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1 5 10

<210> 15
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aaaatctaga cggcgatggc gaacgctagt ga 32

<210> 16
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<223> Description of Artificial Sequence:reverse primer

<400> 16
aaaatctaga cactttgaga gtcttgtgaa ggc 33

<210> 17
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Forward primer

<400> 17
aaaatctaga tctatggcga actatagcca tgc 33

<210> 18
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Forward primer

<400> 18
aaaatctaga aaggctaaag atttacagat gctcc 35

<210> 19
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 19
aaaatctaga caaatactga actggccgat cccc 34

<210> 20
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 20
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<210> 21
<211> 1134
<212> DNA
<213> Rattus sp.

<220>
<221> CDS
<222> (1)..(1131)
<223> Rat SREB1

<400> 21

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Met Ala Asn Ala Ser Glu Pro Gly Gly Gly Gly Gly Ala Glu Ala
  1               5                  10                  15

gcc gcg ctg ggc ctc agg ctg gcc aca ctc agc ctg ctg ctg tgc gtg   96
Ala Ala Leu Gly Leu Arg Leu Ala Thr Leu Ser Leu Leu Leu Cys Val
            20                  25                  30

agc ctg gcg ggc aac gtg ctg ttc gct ctg ctc atc gtg agg gag cgc   144
Ser Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg
        35                  40                  45

agc ctg cac cgc gcg cct tac tac ctg ctg ctc gac ctg tgc ctg gcc   192
Ser Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala
    50                  55                  60

gac ggg ctg cgc gcg ctc gcc tgt ctc ccg gcc gtc atg ctg gct gcg   240
Asp Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala
65                  70                  75                  80

cgg cgc gcg gca gcc gcg gcg ggg acg cct ccg ggt gcg ctg ggc tgc   288
Arg Arg Ala Ala Ala Ala Ala Gly Thr Pro Pro Gly Ala Leu Gly Cys
                85                  90                  95

aag ctg ctg gcc ttc ctg gcc gcg ctc ttc tgc ttc cac gcg gcc ttc   336
```

Lys Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe
100 105 110

ctg ctg ctg ggc gtg ggc gtc acc cgc tac ctg gcc atc gct cac cac 384
Leu Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His
115 120 125

cgc ttc tat gcc gag cgc ctg gcc ggc tgg ccg tgc gcc gcg atg ctg 432
Arg Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu
130 135 140

gtg tgc gcc gcc tgg gcg ctg gct ttg gcc gcg gcc ttc ccg ccg gtg 480
Val Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Ala Phe Pro Pro Val
145 150 155 160

ctg gac ggc ggt ggc gcg gac gac gag gat gcg ccg tgc gcc ctg gag 528
Leu Asp Gly Gly Gly Ala Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu
165 170 175

cag cgg ccc gac ggc gcc ccg ggt gcg cta ggc ttc ctg ctg ctc ctg 576
Gln Arg Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Leu
180 185 190

gcc gcg gtg gtg ggc gcc acg cac ctc gtc tac ctt cgc ctg ctc ttc 624
Ala Ala Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe
195 200 205

ttc atc cac gac cgc cgc aag atg cgg ccc gca cgc ctg gtg ccc gcc 672
Phe Ile His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala
210 215 220

gtc agc cac gac tgg acc ttc cac ggc ccg ggc gcc acc ggt caa gcg 720
Val Ser His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala
225 230 235 240

gcc gcc aac tgg acg gcg ggc ttc ggc cgc ggg ccc acg cca cct gcg 768
Ala Ala Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala
245 250 255

ctc gtg ggc atc agg cct gca ggc ccg ggc cgc gga gcc cgg cgc ctc 816
Leu Val Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu
260 265 270

ctg gtg ctg gag gaa ttc aag acg gag aag agg ctg tgc aag atg ttc 864
Leu Val Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe
275 280 285

tac gcc atc acg ctg ctc ttc ctg ctc ctc tgg ggg ccc tat gtg gtt 912
Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val
290 295 300

gcc agt tac ctg cgc gtc ctg gtg cgg ccc gga gct gtc ccg cag gcc 960
Ala Ser Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala
305 310 315 320

tac ctg aca gcc tcg gtg tgg ctg aca ttc gca cag gcc ggc atc aac 1008

```
Tyr Leu Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn
                325                 330                 335

ccc gtg gtg tgt ttc ctc ttc aac cgg gag ctg agg gac tgt ttc aga   1056
Pro Val Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg
            340                 345                 350

gcc cag ttc ccc tgt tgc cag agc ccc cag gcc acg cag gcc acc ctc   1104
Ala Gln Phe Pro Cys Cys Gln Ser Pro Gln Ala Thr Gln Ala Thr Leu
        355                 360                 365

ccc tgc gac ctg aaa ggc att ggt ttg tga                          1134
Pro Cys Asp Leu Lys Gly Ile Gly Leu
    370                 375
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<210> 22
<211> 377
<212> PRT
<213> Rattus sp.

<400> 22

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Met Ala Asn Ala Ser Glu Pro Gly Gly Gly Gly Gly Gly Ala Glu Ala
  1               5                  10                  15

Ala Ala Leu Gly Leu Arg Leu Ala Thr Leu Ser Leu Leu Leu Cys Val
             20                  25                  30

Ser Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg
         35                  40                  45

Ser Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala
     50                  55                  60

Asp Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala
 65                  70                  75                  80

Arg Arg Ala Ala Ala Ala Ala Gly Thr Pro Pro Gly Ala Leu Gly Cys
                 85                  90                  95

Lys Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe
            100                 105                 110

Leu Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His
        115                 120                 125

Arg Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu
    130                 135                 140

Val Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Ala Phe Pro Pro Val
145                 150                 155                 160

Leu Asp Gly Gly Gly Ala Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu
                165                 170                 175

Gln Arg Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Leu
```

180 185 190

Ala Ala Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe
195 200 205

Phe Ile His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala
210 215 220

Val Ser His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala
225 230 235 240

Ala Ala Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala
245 250 255

Leu Val Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu
260 265 270

Leu Val Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe
275 280 285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val
290 295 300

Ala Ser Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala
305 310 315 320

Tyr Leu Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn
325 330 335

Pro Val Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg
340 345 350

Ala Gln Phe Pro Cys Cys Gln Ser Pro Gln Ala Thr Gln Ala Thr Leu
355 360 365

Pro Cys Asp Leu Lys Gly Ile Gly Leu
370 375

<210> 23
<211> 1113
<212> DNA
<213> Rattus sp.

<220>
<221> CDS
<222> (1)..(1110)
<223> Rat SREB2

<400> 23
atg gcg aac tat agc cat gca gct gac aac att ttg caa aat ctc tcg 48
Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
1 5 10 15

cct cta aca gcc ttt ctg aaa ctg act tcc ttg ggt ttc ata ata gga 96
Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly

```
                  20                  25                  30

gtc agt gtg gtg ggc aac ctt ctg atc tcc att ttg cta gtg aaa gat   144
Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
          35                  40                  45

aag acc ttg cat aga gct cct tac tac ttc ctg ctg gat ctg tgc tgc   192
Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
      50                  55                  60

tca gac atc ctc aga tct gca att tgt ttt cca ttt gta ttc aac tct   240
Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
  65                  70                  75                  80

gtc aaa aat ggc tct acc tgg act tac ggg act ctg act tgc aaa gtg   288
Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
                  85                  90                  95

att gcc ttt ctg ggg gtt ttg tcc tgt ttc cac act gcc ttc atg ctc   336
Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
             100                 105                 110

ttc tgc atc agc gtc acc aga tac tta gcc atc gcc cat cac cgc ttc   384
Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
         115                 120                 125

tat aca aag agg ctg acc ttt tgg acg tgt ttg gct gtg atc tgc atg   432
Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
     130                 135                 140

gtg tgg act ctg tct gtg gcc atg gca ttt ccc cca gtt tta gat gta   480
Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
145                 150                 155                 160

ggc acc tac tca ttc att agg gag gag gat cag tgt acc ttc caa cac   528
Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
                165                 170                 175

cgc tcc ttc agg gct aac gat tcc cta gga ttt atg ctg ctc ctt gct   576
Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Leu Ala
            180                 185                 190

ctc atc ctc cta gcc aca cag ctt gtc tac ctc aag ctg ata ttt ttt   624
Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
        195                 200                 205

gtc cac gat cga agg aaa atg aag cca gtc cag ttt gta gca gca gtg   672
Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
    210                 215                 220

agt cag aac tgg acc ttt cat ggc cct gga gct agt ggc cag gca gct   720
Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
225                 230                 235                 240

gcc aat tgg cta gca gga ttt gga agg ggt ccc aca cca ccc acc ttg   768
Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu
```

```
                245                 250                 255

ctg ggc atc agg caa aat gcg aat acc aca ggc aga aga cgg ctc ttg   816
Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
            260                 265                 270

gtt ttg gat gag ttc aaa atg gag aaa aga atc agc aga atg ttc tat   864
Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
        275                 280                 285

ata atg act ttc ctc ttc cta acc ttg tgg ggt ccc tac ctg gtg gcc   912
Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
    290                 295                 300

tgc tat tgg aga gtt ttt gca aga ggg cct gta gta cca ggg gga ttt   960
Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe
305                 310                 315                 320

cta aca gcc gct gtc tgg atg agt ttc gcc caa gca gga atc aat ccc  1008
Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
                325                 330                 335

ttt gtc tgc att ttc tcc aac agg gag ctg agg cgc tgt ttc agc aca  1056
Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
            340                 345                 350

acc ctt ctt tac tgc aga aaa tcc agg tta cca agg gaa cct tac tgt  1104
Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys
        355                 360                 365

gtt ata tga                                                     1113
Val Ile
    370
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<210> 24
<211> 370
<212> PRT
<213> Rattus sp.

<400> 24

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Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
  1               5                  10                  15

Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly
            20                  25                  30

Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
        35                  40                  45

Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
    50                  55                  60

Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
65                  70                  75                  80
```

Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
85 90 95

Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
100 105 110

Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
115 120 125

Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
130 135 140

Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
145 150 155 160

Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
165 170 175

Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Leu Ala
180 185 190

Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
195 200 205

Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
210 215 220

Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
225 230 235 240

Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu
245 250 255

Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
260 265 270

Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
275 280 285

Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
290 295 300

Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe
305 310 315 320

Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
325 330 335

Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
340 345 350

Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys
355 360 365

Val Ile
370

<210> 25
<211> 1122
<212> DNA
<213> Rat coronavirus

<220>
<221> CDS
<222> (1)..(1119)
<223> Rat SREB3

<400> 25

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atg gcc aac acc acc gga gag ccc gaa gag gtg agc ggc gca ctg tcc   48
Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser
  1               5                  10                  15

ctg cca tca gca tcg gct tat gtg aag ctg gtg ctg ctg gga ctg atc   96
Leu Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile
             20                  25                  30

atg tgt gta agc ctg gca ggc aat gcc atc ttg tcc ctg ctg gtg ctc  144
Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
         35                  40                  45

aag gag cgt gcc ctg cac aag gct cct tac tac ttt ctg ctg gac ctg  192
Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
     50                  55                  60

tgc cta gcc gat ggc ata cgc tct gcc atc tgc ttc ccc ttt gta ctg  240
Cys Leu Ala Asp Gly Ile Arg Ser Ala Ile Cys Phe Pro Phe Val Leu
 65                  70                  75                  80

gct tct gtg cgc cat ggc tcc tcg tgg acc ttc agt gca ctc agc tgt  288
Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
                 85                  90                  95

aag att gtg gcc ttt atg gct gtg ctc ttt tgc ttc cat gcg gcc ttc  336
Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
            100                 105                 110

atg ctg ttc tgc atc agc gtc acc cgc tac atg gcc atc gcc cac cac  384
Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
        115                 120                 125

cgc ttc tat gcc aag cgc atg aca ctc tgg aca tgc gca gct gtc atc  432
Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
    130                 135                 140

tgc atg gcc tgg acc ttg tct gtg gcc atg gct ttc cca cct gtc ttt  480
Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
145                 150                 155                 160

gat gtg ggc acc tac aag ttt atc cga gag gag gac cag tgc atc ttt  528
Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
                165                 170                 175
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```
gag cat cgc tac ttc aaa gca aat gac act ctg ggc ttt atg ctt atg   576
Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met
            180                 185                 190

ttg gct gtg ctc atg gca gcc aca cat gct gtc tat ggc aag ctg cta   624
Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu
        195                 200                 205

ctc ttc gag tat cgt cac cgc aag atg aag cca gtg cag atg gtg ccc   672
Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
    210                 215                 220

gcc atc agc caa aac tgg aca ttc cat ggc cct ggg gct acc ggc cag   720
Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
225                 230                 235                 240

gct gct gcc aac tgg atc gct ggc ttt ggc cgt ggg ccc atg cca cca   768
Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
                245                 250                 255

act ctg ctg ggt atc cgg cag aat ggg cat gca gct agc cgg cgg cta   816
Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
            260                 265                 270

ctg ggc atg gac gag gtc aag ggt gaa aag cag ctg ggc cga atg ttc   864
Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
        275                 280                 285

tac gcg att aca ctg ctc ttc ctg ctc ctc tgg tca cca tac att gtg   912
Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
    290                 295                 300

gcc tgc tac tgg cga gtg ttt gtg aaa gcc tgc gct gtg ccc cac cgc   960
Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
305                 310                 315                 320

tac ctg gcc act gct gtt tgg atg agc ttc gcc cag gct gct gtc aac  1008
Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
                325                 330                 335

cca atc gtc tgc ttc ctg ctt aac aag gac ctc aag aag tgc ctg agg  1056
Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
            340                 345                 350

act cat gcc cct tgc tgg ggc aca gga ggt gcc cca gct ccc aga gaa  1104
Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
        355                 360                 365

ccc tac tgt gtc atg tga                                         1122
Pro Tyr Cys Val Met
    370
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<210> 26
<211> 373

<212> PRT
<213> Rat coronavirus

<400> 26

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Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser
 1               5                  10                  15

Leu Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile
            20                  25                  30

Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
        35                  40                  45

Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
    50                  55                  60

Cys Leu Ala Asp Gly Ile Arg Ser Ala Ile Cys Phe Pro Phe Val Leu
65                  70                  75                  80

Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
                85                  90                  95

Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
            100                 105                 110

Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
        115                 120                 125

Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
    130                 135                 140

Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
145                 150                 155                 160

Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
                165                 170                 175

Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met
            180                 185                 190

Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu
        195                 200                 205

Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
    210                 215                 220

Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
225                 230                 235                 240

Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
                245                 250                 255

Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
            260                 265                 270

Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
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275 280 285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
290 295 300

Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
305 310 315 320

Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
325 330 335

Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
340 345 350

Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
355 360 365

Pro Tyr Cys Val Met
370